

drylin[®] linear technology – Carbon fibre

Lightweight and robust

Non-metallic

Non-magnetic

X-ray transparent

Lubrication and maintenance-free



Extremely lightweight and 100% lubrication-free


Extremely lightweight: drylin® carbon fibre


Extremely lightweight and yet extremely strong – tribologically optimised drylin® linear systems made from plastic and carbon fibre combine these properties. Whether as guide or linear axis: All systems are 100% lubrication and maintenance-free.


- Extremely lightweight
- Wear-resistant
- Tough and reliable
- Non-metallic
- Non-magnetic
- X-ray transparent

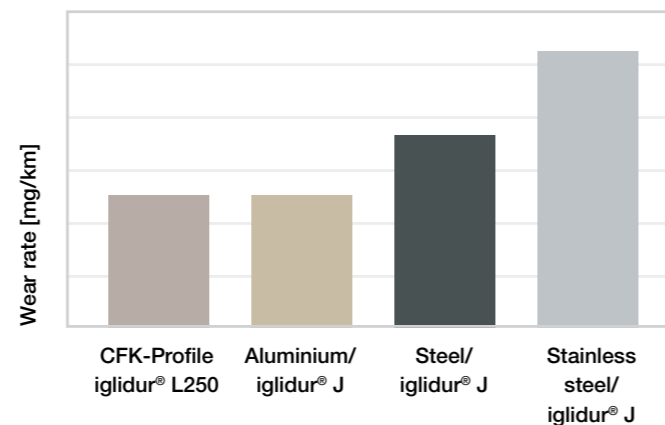
Typical application areas

- Aircraft interior
- Laboratory and medical technology
- Measuring technology

 **Available in 3–8 days**
Detailed information about delivery time online.

 **Price breaks online**
No minimum order value. No minimum order quantity.

 **Max. +60°C**
Min. 0°C



High strength carbon made in pultrusion process

Tribologically optimised drylin® W rails made from carbon fibre

Solid plastic carriage made from lubrication-free iglidur® L250

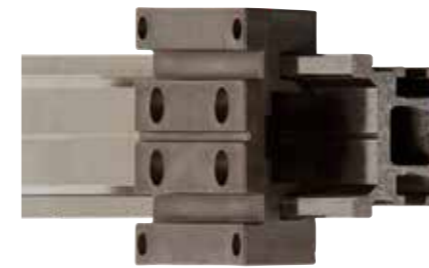
Extreme weight saving
25% lighter than aluminium
75% lighter than steel

Available as linear guide or with drive (lead screw/toothed belt)

High strength and resistant

End block drive shaft supported with dry operating xiros® ball bearings with balls made of glass or plastic

Linear guides and modules made of solid plastic and carbon fibre



drylin® W linear guide made of carbon/solid plastic

- Extremely lightweight and strong carbon profile
 - Tribologically optimised
 - Solid plastic carriage made from iglidur® L250
- Page 1202



drylin® ZLW toothed belt axis with carbon profile

- Absolutely non-metallic
 - Neoprene toothed belt drive with glass fibre reinforcement
 - Max. stroke length 1,000mm
- Page 1203



drylin® SAW linear module made from carbon fibre

- drylin® W profile made of carbon fibre
 - Drive: Trapezoidal or high-helix lead screw
 - Lightest version with carbon, solid plastic, aluminium lead screw
- Page 1204



drylin® SHTP linear module with round carbon fibre shafts

- Very lightweight due to carbon fibre hollow shafts and solid plastic
 - Ideal for multi-carriage solutions, also opposite
 - Configurable with accessories for manual and electric adjustment
- Page 1205



drylin® CWM round shaft made from carbon fibre

- Very lightweight due to hollow shaft geometry
 - Hollow rail for supply lines
 - Surface UCU (unidirectional/cross-winding/unidirectional)
- Page 1206

drylin® W carbon fibre | Product range

Linear guide system – extremely lightweight and strong

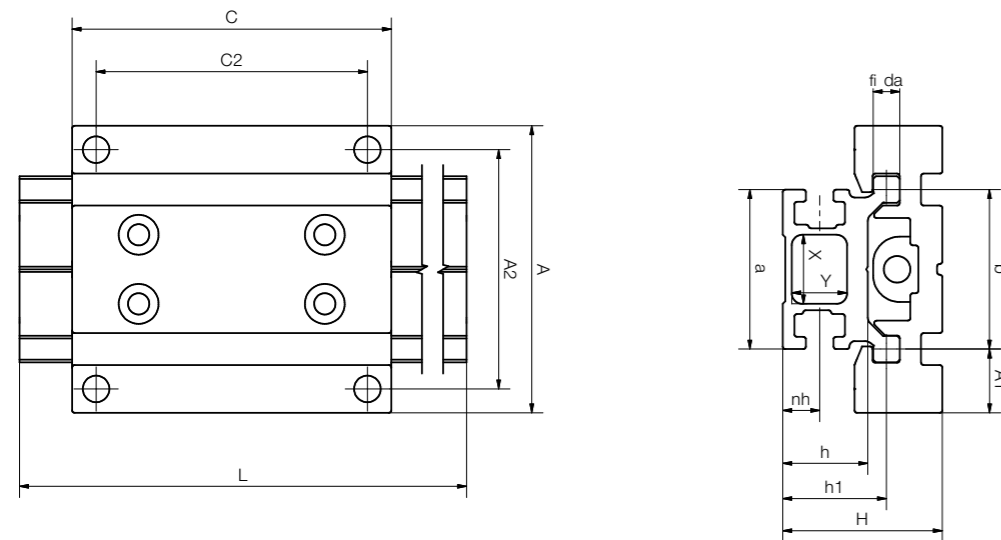


Order key
Complete solution

Type	Dimensions [mm]/Type
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W K P C-06-30-06

drylin® W	Complete system	Plastic	Carbon fibre	Shaft Ø	Rail width	Carriage length
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Technical data – guide rail made from carbon

Part No.	F max. radial		Weight	I _y	I _z
	stat. [N]	dyn. [N]			
WSPC-06-30	300	60	410	30,391	11,674

Dimensions [mm] – guide profile made from carbon

Part No.	a	b	da	h	h1	nh	X	Y	L
WSPC-06-30	30	30	5 -0.1	16	19.5	7	13	10	3,000

Dimensions [mm] solid plastic guide carriage made from iglidur® polymer

Part No.	H	A1	A	A2	C	C2
WWPL-06-30-06	30	12	54	45	60	51

drylin® ZLW carbon fibre | Product range

Toothed belt axis – non-metallic



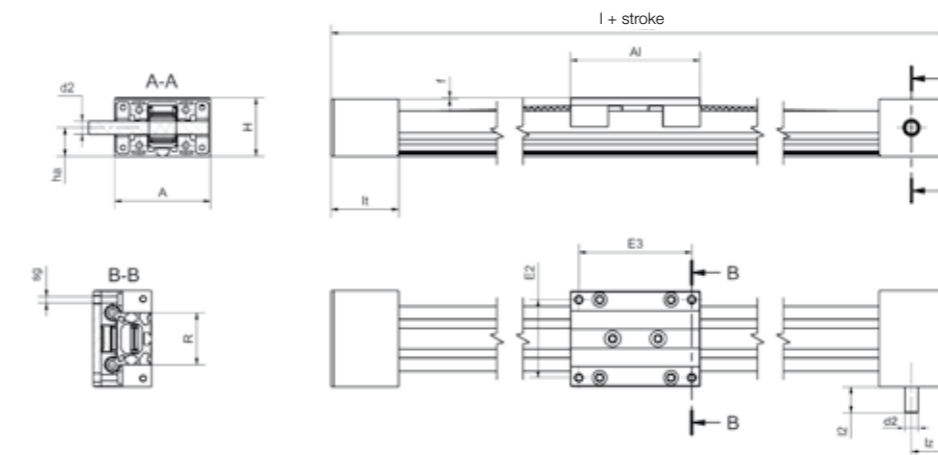
Order key

Type	Dimensions [mm]/Type
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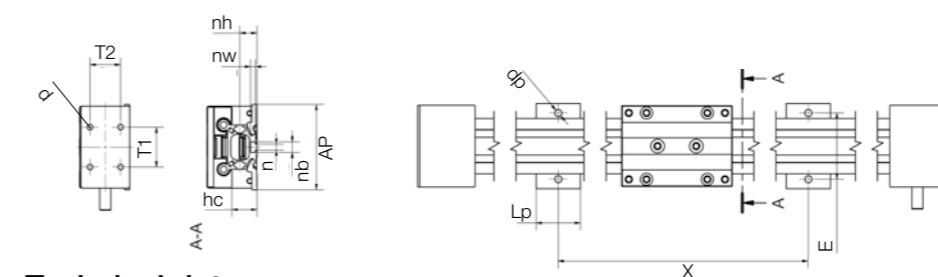
ZLW-06 30-P-1000

Toothed belt axis	Shaft Ø	Rail width	Plastic	Stroke length
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- Guide profile made from carbon
- Linear carriage made from iglidur® polymer



Connection size



Technical data

Part No.	Weight without stroke [kg]	Weight 100mm stroke [kg]	Max. stroke length [mm]	Transmission [mm/rev]	Tooth profile	Drive belt		
						-material	-width [mm]	-tension [N]
Basic 02 P	0.3	0.08	1,000	54	HTD 3M	Neoprene with GF	9	25

Dimensions [mm]

Part No.	A	AI	H	E2	E3	I	R	f	It	ha	Iz	I2	d2
ZLW-0630-P	54 -0.3	60	31	45 ±0.15	51 ±0.15	144	30 ±0.15	3	42 -0.3	14	20	20	8 h9

Connection size

Part No.	X	E	AP	Lp	dp	d	T1	T2
ZLW-0630-P	variable	40 ±0.2	52 -1.0	15	5.5	3	20 ±0.25	21 -0.3

drylin® SAW carbon fibre | Product range

Linear module with high profile carbon fibre – lightweight and robust



- Guide profile made from carbon
- Linear carriage made from iglidur® polymer

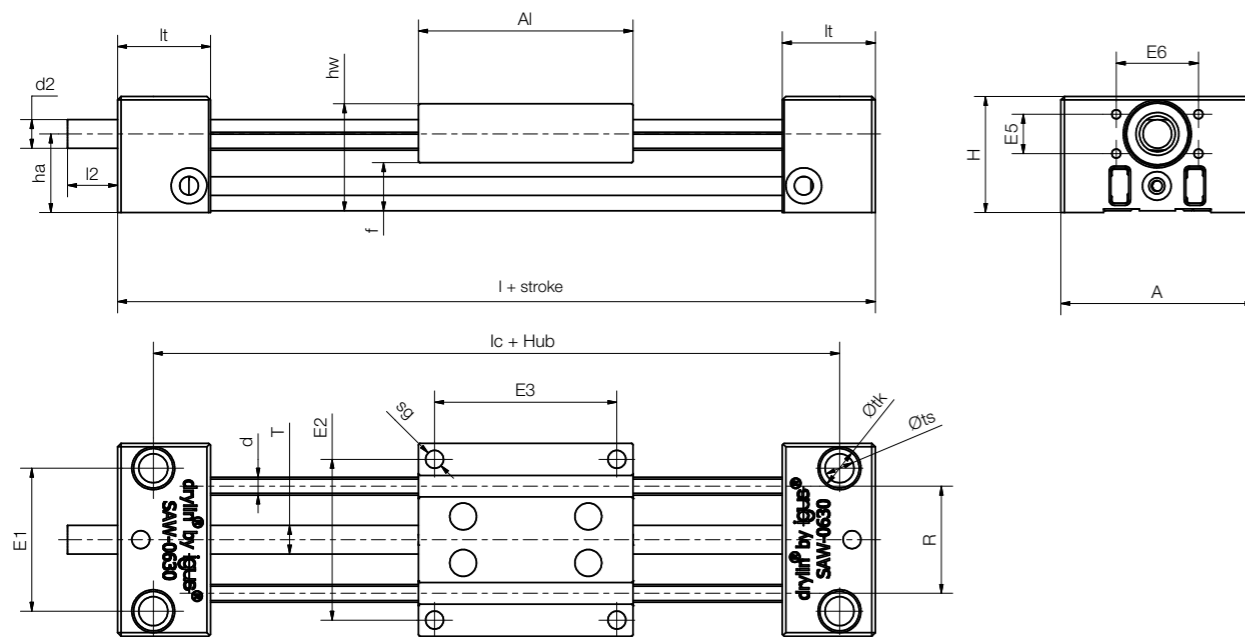


Order key
Complete solution

Type	Dimensions [mm]/Type
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SAW-06 30-P-1000

drylin® linear module	Shaft Ø	Rail width	Plastic	Stroke length
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Technical data

Part No.	Stroke length [mm]	Weight		Max. speed [1/min]	Max. static load capacity	
		Standard [kg]	Additional per 100mm [kg]		axial [N]	radial [N]
SAW-0630-P-...	300	0.25	0.07	1,000	50	50

Dimensions [mm]

Part No.	A	Al	H	E1	E2	E3	E5	E6	l	lc	hw	f	lt
	-0.3			±0.15	±0.15	±0.15							±0.1
SAW-0630-P-...	54	60	32.5	40	45	51	11	23	112	92	80	13.5	26

Part No.	tk	ts	sg	d	T	l2	d2	ha
SAW-0630-P-...	11	6.6	5	□ 5	8	15	Tr8x1.5	22

drylin® SHTP carbon fibre | Product range

Linear module with carbon fibre hollow shafts – ideal for multi-carriage solutions



- Lead screws made from carbon
- Linear carriage made from iglidur® polymer

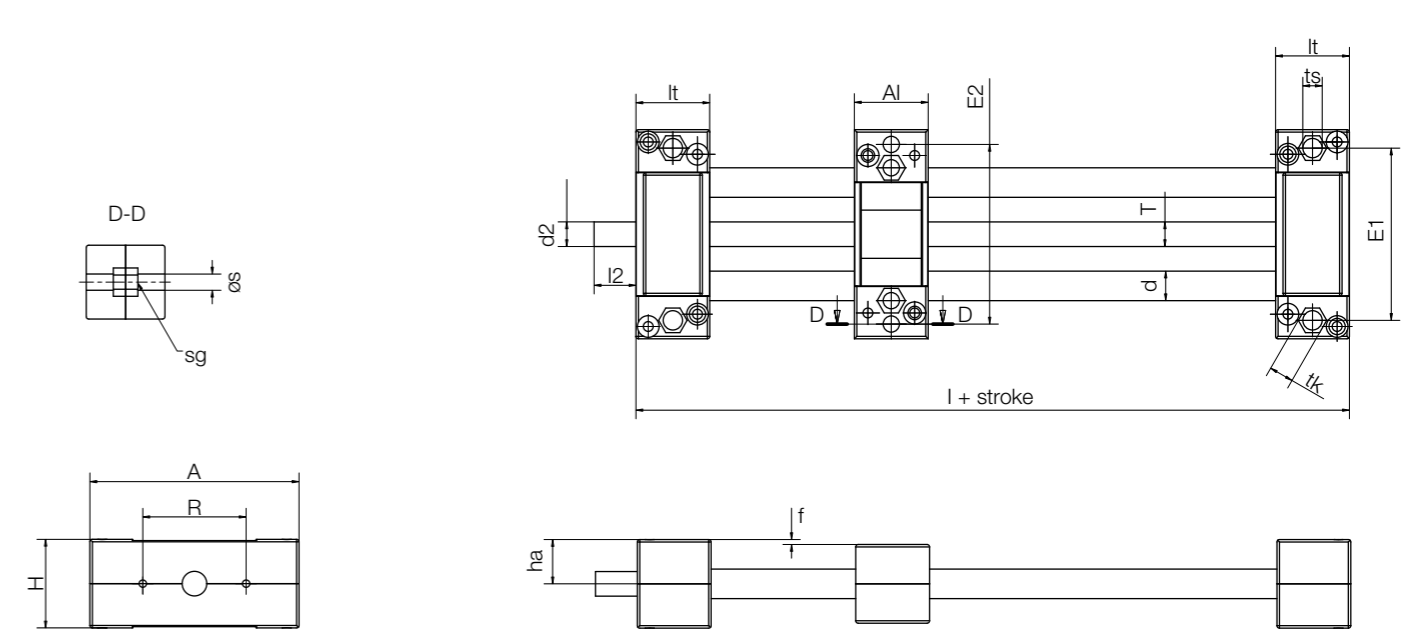


Order key
Complete solution

Type	Dimensions [mm]/Type
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SHTP-01-12-CWM

Linear module	Plastic	Design	Dimension	Carbon fibre shaft
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Technical data

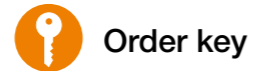
Part No.	Max. stroke length [mm]	Carbon fibre shaft		More information
		Weight [kg]	Additional [kg] (per 100mm)	
SHTP-01-12-CWM	500	0.3	0.06	Drive nut and linear bearings made from iglidur® J
SHTP-02-12-CWM	500	0.3	0.06	Bearing and nut integrated into the carriage

Dimensions [mm]

Part No.	A	Al	H	E1	E2	l	R	f	lt	tk	ts
									±0.1		+0.15
SHTP-01-12-CWM	85	30	36	70	73	90	42	2	30	10	6.0
SHTP-02-12-CWM	85	30	36	70	73	90	42	2	30	10	6.0

Part No.	s	sg	d	T	l2	d2 ⁹⁹⁾	ha	Max. static load capacity	
								axial [N]	radial [N]
SHTP-01-12-CWM	6.3	M6	12	Tr10x2	17	Tr10x2	18	100	100
SHTP-02-12-CWM	6.3	M6	12	Tr10x2	17	Tr10x2	18	100	100

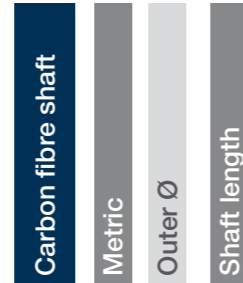
⁹⁹⁾ Lead screw end unmachined (standard)



Order key

Type Dimensions [mm]

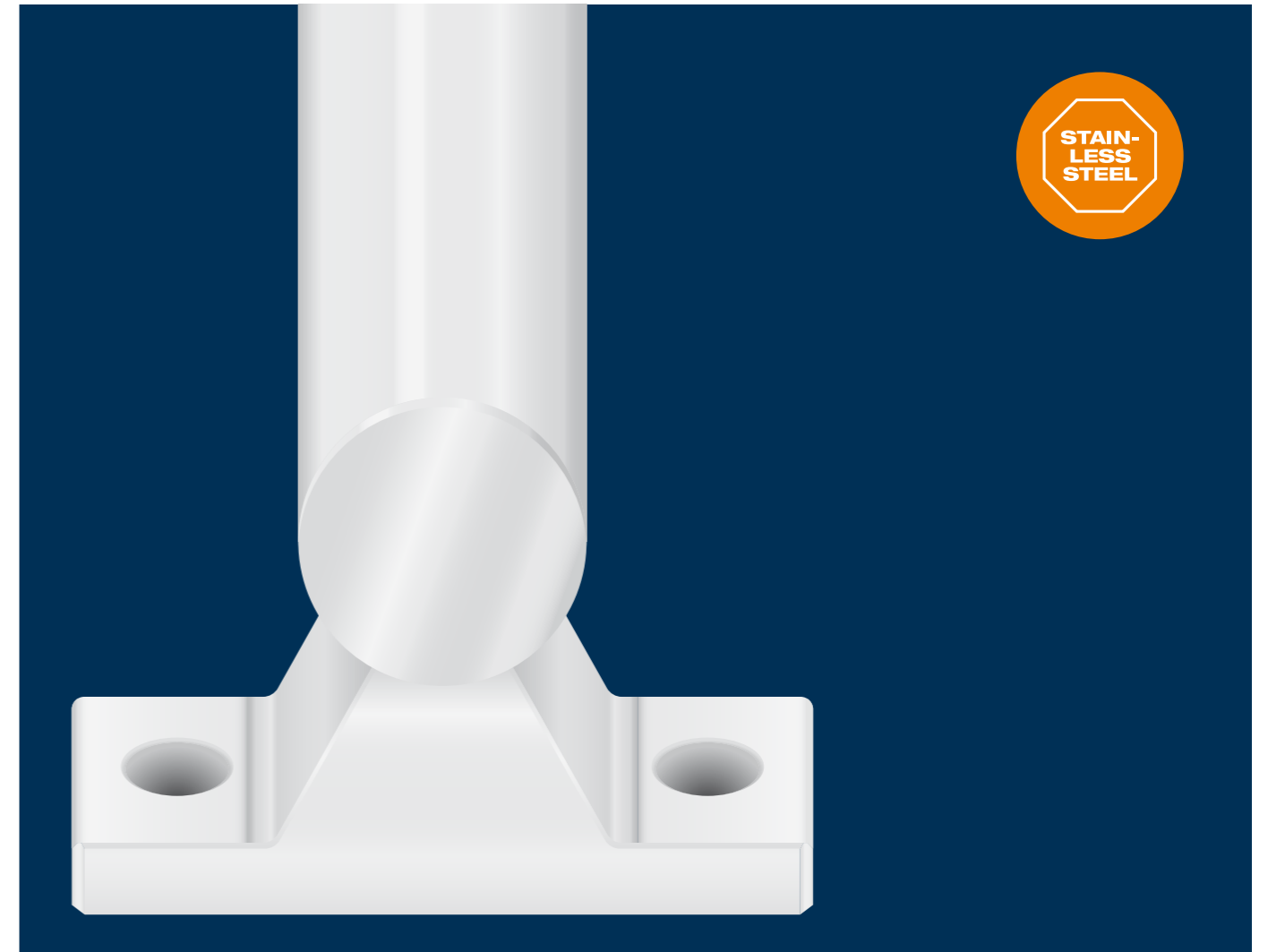
CWM-12-300



- Material: CFK composite
- Roundness tolerance: $\pm 0.05\text{mm}$
- Diameter tolerance: -0.1mm
- Application temperature: max. $+80^\circ\text{C}$

Dimensions [mm]

Part No.	Design	Diameter -0.1	Max. length	Weight [g]
CWM-12	Hollow shaft	12/9	2,000	70
CWM-16	Hollow shaft	16/12.5	2,000	120
CWM-20	Hollow shaft	20/16	2,000	170
CWM-30	Hollow shaft	30/26	2,000	270



drylin® linear technology – products made of stainless steel

Temperature resistant up to $+250^\circ\text{C}$

Corrosion-free

Chemical resistance

Ready-to-install linear guides and modules

Lubrication and maintenance-free

